

20021114.qrp v02\_n740.qrl.20021114

Date: Thu, 14 Nov 2002 19:03:10 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 2740

QRP-L Digest 2740

Topics covered in this issue include:

- 1) [140074] Re: QRP Definition - Input vs Output?  
by "Mike Yetsko" <myetsko@insydesw.com>
- 2) [140075] paddle wanted  
by showell@lrxms.net (Scott Howell)
- 3) [140076] Re: grouchy? you aint seen nothin  
by Thom LaCosta <baltimoremd@baltimoremd.com>
- 4) [140077] Re: QRP Definition - Input vs Output?  
by "Russ Hines" <wb8zcc@one.net>
- 5) [140078] Re: QRP Definition - Input vs Output?  
by "Russ Hines" <wb8zcc@one.net>
- 6) [140079] Flying Pig QRP Net Tonight  
by "Brian" <brian@iquest.net>
- 7) [140080] Re: QRP Definition - Input vs Output?  
by "Russ Hines" <wb8zcc@one.net>
- 8) [140081] Re: HB: Antenna Analyzer bridge  
by Lew Paceley <lew@paceley.com>
- 9) [140082] Fox- K4FB  
by Paul Womble <pwomble1@tampabay.rr.com>
- 10) [140083] Re: No excuses TX... hmmm  
by Lew Paceley <lew@paceley.com>
- 11) [140084] RE: QRP Definition - Input vs Output?  
by "Tracy Markham" <tracy@bytemark.com>
- 12) [140085] Re: It really frosts me....  
by "William Phinizy" <k6whp@verizon.net>
- 13) [140086] Truffle Announcement  
by "Jay" <aj4ay@worldnet.att.net>
- 14) [140087] Re: FOX; Tomorrow  
by K2PQ <k2pq@comcast.net>
- 15) [140088] W20Y Mantra  
by wkhibbert@juno.com
- 16) [140089] NEQRP CW Net, Thursday, 14 November 02, 08:30 EST, 3.565MHz  
by Chuck Ludinsky <cjl@mitre.org>
- 17) [140090] Re: FOX; Tomorrow  
by Dan Wolfe <n4roa@mounet.com>
- 18) [140091] Re: No excuses TX... hmmm  
by Chris Cartwright <ccart@phideaux.com>
- 19) [140092] FS HP 971 DMM

- by "Rod N0RC" <rod@n0rc.us>
- 20) [140093] FOX: Solar Info  
by "Karl F. Larsen" <k5di@zianet.com>
- 21) [140094] Scotch 92 tape  
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 22) [140095] Re: W20Y Mantra  
by "Lee Mairs" <lmairs@direcway.com>
- 23) [140096] FS: LDG Z-11 & FT-817 Accessories - Update!  
by "Dave Redfearn" <n4elm@attbi.com>
- 24) [140097] FT-897  
by Dave Pomeory <dave@dpomeroy.com>
- 25) [140098] Re: Power Meter  
by "Karl F. Larsen" <k5di@zianet.com>
- 26) [140099] Re: QRP Definition - Input vs Output?  
by "George, W5YR" <w5yr@att.net>
- 27) [140100] Re: QRP Definition - Input vs Output?  
by "George, W5YR" <w5yr@att.net>
- 28) [140101] QRP-Lunch - South San Jose - This Saturday!  
by "Dave Fifield" <dave@redhotradio.com>
- 29) [140102] Input vs output  
by hamjoel@juno.com
- 30) [140103] [CONTEST] N2CQ QRP Contest Calendar Nov 14-30  
by "Ken Newman" <n2cq@dandy.net>
- 31) [140104] Re: paddle wanted  
by Ed Tanton <n4xy@earthlink.net>
- 32) [140105] QRP, ERP, and EIRP  
by "Scott Rosenfeld [N7JI]" <ham@w3eax.umd.edu>
- 33) [140106] QSL and \$\$\$  
by "Doc K0EVZ" <dock0evz@earthlink.net>
- 34) [140107] FOX: Web Site Updated  
by "Marshall Emm" <mgemm@mtechnologies.com>
- 35) [140108] Re: QSL and \$\$\$  
by "Dennis Ponsness" <wb0wao@hotmail.com>
- 36) [140109] Re: HB: Antenna Analyzer bridge  
by David Hinerman <WD8CIV@worldnet.att.net>
- 37) [140110] UPDATE: Experimenter's DDS Signal Generator  
by "Trevor Jacobs" <kg6cyn@earthlink.net>
- 38) [140111] RE: FT-897  
by "Dave Fifield" <dave@redhotradio.com>
- 39) [140112] Re: San Jose this weekend  
by Ingo Meyer DK3RED <dk3red@gmx.net>
- 40) [140113] Re: Code Improvements  
by Ingo Meyer DK3RED <dk3red@gmx.net>
- 41) [140114] Re: HB: Antenna Analyzer bridge  
by David Hinerman <WD8CIV@worldnet.att.net>
- 42) [140115] RE: FT-897  
by Dave Pomeory <dave@dpomeroy.com>
- 43) [140116] Re: QSL and \$\$\$

- by "Karl F. Larsen" <k5di@zianet.com>
- 44) [140117] Re: tiny micros need tiny I/O  
by <stanw@toxosor.com>
- 45) [140118] FOX Backchannel  
by Dave Gingrich K9DC <gingrich2@dcg.org>
- 46) [140119] For Trade: Vibroplex Brass Racer Paddle  
by Michael Babineau <michael.babineau@sympatico.ca>
- 47) [140120] Mismatch Protection Design  
by "Brad Hernlem" <alihernlem@hotmail.com>
- 48) [140121] Re: FS/T K2 or to trade for various TT gear  
by k7gt@attbi.com
- 49) [140122] FS: FT-817-Z11 etc  
by <giorgio9330@earthlink.net>
- 50) [140123] Charge Gel Cell In Car  
by "Jerry Bartachek" <leadsheet@musician.org>
- 51) [140124] RE: QRP Definition - Input vs Output?  
by "KD5NWA" <KD5NWA@mbayona.com>
- 52) [140125] Re: FOX Backchannel  
by "Mike WA8BXN" <hubby2k@hotmail.com>
- 53) [140126] Re: Charge Gel Cell In Car  
by "" <markb@abq.com>
- 54) [140127] Re: FOX Backchannel  
by Dave Gingrich K9DC <gingrich2@dcg.org>
- 55) [140128] Re: QRP Definition - Input vs Output?  
by "George, W5YR" <w5yr@att.net>
- 56) [140129] San Jose QRP Lunch with Brad Mitchell This Saturday is a go.  
by "Doug Hendricks" <ki6ds@dph.dpol.net>
- 57) [140130] Re: Charge Gel Cell In Car  
by "Mike Yetsko" <myetsko@insydesw.com>
- 58) [140131] Re: SideKick Builders Report de KI6DS  
by "Chuck Adams, K7Q0" <k7qo@earthlink.net>
- 59) [140132] Re: HB: Antenna Analyzer bridge  
by Steven Weber <kd1jv@moose.ncia.net>
- 60) [140133] Re: QRP Definition - Input vs Output?  
by "DTX" <dtx@wood.tzo.com>
- 61) [140134] Re: No excuses TX... hmmm (long)  
by Chris Cartwright <ccart@phideaux.com>
- 62) [140135] Re: Charge Gel Cell In Car  
by "Lee Mairs" <lmairs@direcway.com>
- 63) [140136] Measuring ground efficiency?  
by Alex <kr1st@amsat.org>
- 64) [140137] ID those SMD parts  
by David Snowdon <norway@passport.ca>
- 65) [140138] Re: Charge Gel Cell In Car  
by "" <markb@abq.com>
- 66) [140139] Re: Charge Gel Cell In Car  
by "" <markb@abq.com>
- 67) [140140] OT:Trying to e-mail David Porter

by "Trevor Jacobs" <kg6cyn@earthlink.net>  
68) [140141] Re: Measuring ground efficiency?  
by "" <markb@abq.com>  
69) [140142] Ft Wayne Hamfest QRP Forum Reminder  
by "Bill Kelsey - N8ET - Kanga US" <kanga@bright.net>

-----  
Date: Wed, 13 Nov 2002 18:40:25 -0500  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <wb8zcc@one.net>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140074] Re: QRP Definition - Input vs Output?  
Message-ID: <003101c28b6e\$0ea430a0\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I suggest you go read some FCC rules, or an old ARRL handbook,  
either one from the 'tube days'.

Mike'

> Nope, the reference "input power" is just the DC input power to the  
final  
> amplifier...plate or collector voltage times plate or collector current.  
It  
> doesn't matter what the drive power is, or whether it's a grounded grid,  
> grounded cathode, etc.  
>  
> W2AGN had the best answer thus far.  
>  
> 73,  
> Russ Hines  
> WB8ZCC  
>  
>  
>  
> ----- Original Message -----  
> From: "Mike Yetsko" <myetsko@insydesw.com>  
> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
> Sent: Wednesday, November 13, 2002 2:04 PM  
> Subject: Re: QRP Definition - Input vs Output?  
>  
>  
> > > I've always worked under the definition of QRP as less than 5 watts

at  
> > the transmitter. But when  
> > > I was reading the ARRL Operating Manual, it says, for their awards,  
that  
> > QRP is defined as 5 watts  
> > > output or 10 watts input. Input to what?  
> > >  
> > > 73,  
> > > Patrick N3EO  
> >  
> > Output is obvious, it's output power. For 'input' it means TOTAL  
> > input power. That's a holdover from tube days, where you measure  
> > not only the plate current times voltage for the power, but you also  
> > have to ADD any drive power. You don't count filament power.  
> >  
> > When they say 'input power', it then means ALL power input to the  
> > final stage of amplification, but not counting 'filament power'.  
> >  
> > Mike  
> >  
> >  
>  
>

-----  
Date: Thu, 14 Nov 2002 00:20:05 +0000  
From: showell@lrxms.net (Scott Howell)  
To: qrp-l@lehigh.edu  
Subject: [140075] paddle wanted  
Message-ID: <20021114002005.GA9165@lrxms.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

First, hello to all my friends. This is Scott/n3byy and hope some of you remember me. I'm still around, but have been mighty siolent. In any case things are cruising along and I thought it time for me to try and get back on the air.

In any case, I would like to find a paddle that fits closely to the following specs.

1. reasonable price. Yeah, well ok, under \$100.
2. as adjustable as possible. Spacing, the whole nine yards.
3. pretty solidly built..um not to pick on Bencher, but well not build in that fashion. Just didn't like them very much and they were just to

touchy.

4. finger pieces should not be really close together and not really tiny either.

Ok, well not a great description, but tell me what ya got and for how much. I've done a little shopping, but thought I'd like to find something maybe someone has around the shack.

Oh, it has to work and look nice.<grin>

tnx es 72

Scott

-----  
Date: Wed, 13 Nov 2002 19:25:10 -0500 (EST)  
From: Thom LaCosta <baltimoremd@baltimoremd.com>  
To: W2AGN <w2agn@w2agn.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [140076] Re: grouchy? you aint seen nothin  
Message-ID: <20021113192422.Q43786-100000@unix1.vhost.min.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 13 Nov 2002, W2AGN wrote:

> On 12 Nov 2002 at 15:35, Walter Amos wrote:

>

> > SHADES OF W20Y .....

> >

> My Hero!

I used to hear him on 75...but forgot his mantra....perhaps someone can post it?

Thom

baltimoremd@baltimoremd.com  
<http://www.baltimoremd.com/>  
<http://www.baltimorehon.com/>  
<http://www.zerobeat.net>  
<http://www.tlchost.net>

Thom LaCosta K3HRN Webmaster  
Baltimore's Home Page  
Home of the Baltimore Lexicon  
Home of The QRP Web Ring and DrakeList  
Web Hosting as low as \$3.49/month

-----  
Date: Wed, 13 Nov 2002 19:36:38 -0500  
From: "Russ Hines" <wb8zcc@one.net>

To: "W2AGN" <w2agn@w2agn.net>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140077] Re: QRP Definition - Input vs Output?  
Message-ID: <019801c28b75\$fc4eeaa0\$4307c00a@wb8zcc1>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Interesting, John. Sure, I'm aware of the operations of the grounded-grid power amplifier, I didn't think it was applicable. The driver output that is "passed through" to the plate load circuitry is combined with the final output. DC input to the final is still  $E_p \times I_p$ . I don't recall (sorry, gray matter deficit over time) that there were conditions regarding the 1kW input limit. But I'll take your word for it, John, that's what you did with your amp.

Keeping an eye on the final cathode current and plate current is a good idea anyway with a grounded grid amp. I'm just not sure it was necessary to satisfy remaining under the old "legal limit." Anyone have an old copy of Part 97 laying about?

Good discussion, thanks. And don't worry about that "QR0" thing. ;-)

73,  
Russ Hines  
WB8ZCC

----- Original Message -----  
From: "W2AGN" <w2agn@w2agn.net>  
To: <wb8zcc@one.net>; "Low Power Amateur Radio Discussion"  
<qrp-1@Lehigh.EDU>  
Sent: Wednesday, November 13, 2002 5:29 PM  
Subject: Re: QRP Definition - Input vs Output?

> On 13 Nov 2002 at 16:54, Russ Hines wrote:  
>  
> > Nope, the reference "input power" is just the DC input power to the  
final  
> > amplifier...plate or collector voltage times plate or collector current.  
It  
> > doesn't matter what the drive power is, or whether it's a grounded  
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> > 73,  
> > Russ Hines  
> > WB8ZCC  
> I thank you for the kind words, but the statement about including drive  
> when using a grounded grid amp is true. I remember that from the old  
> days, and my HB 4-1000A amp. To be legal, you had to include drive power,  
> in determining what was then "1 KW max DC Input." With 6200V on the  
> plate, I had to watch it. (Nope, I wasn't ALWAYS QRP!).  
>  
> ---  
> +---+---+---+---+ John L. Sielke  
> |W||2||A||G||N| <http://www.w2agn.net> [UPDATED]  
> +---+---+---+---+ Ex-K3HLU,TF2WKT,W7JEF,W4MPC,N4JS

-----  
Date: Wed, 13 Nov 2002 19:45:00 -0500  
From: "Russ Hines" <wb8zcc@one.net>  
To: "Mike Yetsko" <myetsko@insydesw.com>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140078] Re: QRP Definition - Input vs Output?  
Message-ID: <01a301c28b77\$111abfd0\$4307c00a@wb8zcc1>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Mike:

Thanks for the reply.

I don't doubt you, I just haven't found anything definitive yet in my '73,  
'74 or '76 Handbooks... sorry, they're the oldest ones I have. No old FCC  
rules either.

73,  
Russ Hines  
WB8ZCC

----- Original Message -----  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <wb8zcc@one.net>; "Low Power Amateur Radio Discussion"  
<qrp-1@Lehigh.EDU>  
Sent: Wednesday, November 13, 2002 6:40 PM  
Subject: Re: QRP Definition - Input vs Output?



> I suggest you go read some FCC rules, or an old ARRL handbook,  
> either one from the 'tube days'.  
>  
> Mike'  
>  
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> >  
> > 73,  
> > Russ Hines  
> > WB8ZCC  
> >  
> >  
> >  
> > ----- Original Message -----  
> > From: "Mike Yetsko" <myetsko@insydesw.com>  
> > To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
> > Sent: Wednesday, November 13, 2002 2:04 PM  
> > Subject: Re: QRP Definition - Input vs Output?  
> >  
> >  
> > > I've always worked under the definition of QRP as less than 5 watts  
> > at  
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> > >

> > > Mike  
> > >  
> > >  
> >  
> >  
> >  
>

-----  
Date: Wed, 13 Nov 2002 19:32:42 -0500  
From: "Brian" <brian@iquest.net>  
To: "Flying Pigs" <fpqrp-1@fpqrp.com>, "QRP-L" <qrp-1@lehigh.edu>  
Subject: [140079] Flying Pig QRP Net Tonight  
Message-ID: <001d01c28b75\$59487330\$f9652bd1@bmurrey2K>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Flying Pigs QRP Club Net is Sunday and Wednesday evenings at 09:00 EST  
(02:00Z).

All check-ins welcome, look for us on or around 7047.5 +/- QRM/N

Randy WV9N is the Sunday Night NCS and Joel KE1LA does the NCS duty on  
Wednesday night.

BE there, or be somewhere!

73 de KB9BVN

=====  
KB9BVN/QRP - New Whiteland IN - EM69WN  
QRP-ARCI #10223 QRP-L #1540 FIST #5695  
FISTS CC #764 - Proud Member ARRL  
HEATH HW-9 @ 2W or NORCAL 40A @ 1.3W  
INTO INFAMOUS AF4PS ATTIC DIPOLE  
SOC #400 AND FLYING PIGS QRP #-57  
=====

Date: Wed, 13 Nov 2002 19:47:22 -0500  
From: "Russ Hines" <wb8zcc@one.net>  
To: <k4oah@mindspring.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140080] Re: QRP Definition - Input vs Output?  
Message-ID: <01a901c28b77\$65060e60\$4307c00a@wb8zcc1>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Thanks, Gary. That's interesting. Do you recall when the "grounded-grid" rule change may have taken place?

73,  
Russ Hines  
WB8ZCC

----- Original Message -----

From: "Garey Barrell" <k4oah@mindspring.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Wednesday, November 13, 2002 6:03 PM  
Subject: Re: QRP Definition - Input vs Output?

>  
> The "feedthrough power" requirement appeared in the FCC rules when G-G  
> Linears became popular, and then disappeared when the shift to "output"  
> power measurement became economically feasible.  
>  
> Just to further confuse the situation, "most" commercial (and homebrew)  
> transmitters actually measured cathode current to keep that HV off the  
> front panel meter. So these meters actually measured the algebraic sum of  
> the plate, screen (if any), and grid currents. Those of us who ran Globe  
> Chiefs and DX-40s didn't worry too much about it!  
>  
> 73, Garey - K40AH  
> Atlanta  
>  
>  
> At 05:29 PM 11/13/2002, W2AGN wrote:  
> >On 13 Nov 2002 at 16:54, Russ Hines wrote:  
> >  
> > > Nope, the reference "input power" is just the DC input power to the  
final  
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> > I thank you for the kind words, but the statement about including drive  
> > when using a grounded grid amp is true. I remember that from the old  
> > days, and my HB 4-1000A amp. To be legal, you had to include drive power,  
> > in determining what was then "1 KW max DC Input." With 6200V on the  
> > plate, I had to watch it. (Nope, I wasn't ALWAYS QRP!).  
> >  
> > ---  
> > +---+---+---+---+ John L. Sielke  
> > |W||2||A||G||N| <http://www.w2agn.net> [UPDATED]  
> > +---+---+---+---+ Ex-K3HLU,TF2WKT,W7JEF,W4MPC,N4JS  
>  
>

-----  
Date: Wed, 13 Nov 2002 18:46:40 -0600  
From: Lew Paceley <lew@paceley.com>  
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Cc: kd1jv@moose.ncia.net  
Subject: [140081] Re: HB: Antenna Analyzer bridge  
Message-ID: <006401c28b77\$4bc891c0\$6501a8c0@swbell.net>  
MIME-version: 1.0  
Content-type: text/plain; charset=Windows-1252  
Content-transfer-encoding: 7BIT

Hi Steve,  
Thanks for sharing a very clean design. I sure don't like carrying my  
big, heavy, MFJ259 around and your design could be just what the  
doctor ordered.

Re: needing a frequency counter, I'm not sure that's true. Since I  
always tune my antennas for the CW bands I was thinking of just  
replacing the variable pot frequency control with a DIP switch and the  
appropriate precision resistors for 7 - 21 MHz. That should be close  
enough, don'tcha think??

Thanks again!

72/73,  
\*Lew\*  
N5ZE

-----  
Date: Wed, 13 Nov 2002 18:59:56 -0500  
From: Paul Womble <pwomble1@tampabay.rr.com>  
To: QRP-L <qrp-l@lehigh.edu>  
Subject: [140082] Fox- K4FB  
Message-ID: <3DD2E77C.D04AFC9B@tampabay.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I'll be the other fox on Thursday night and plan to set up camp  
somewhere near 7042. I will be listening up 1-2 so please spread out.  
I will not hear you on my transmit frequency until the pack dies down.

Standard exchange:

W8PIG 55N FL PAUL 5W W8PIG BK

PLEASE ONLY SEND YOUR INFORMATION ONE TIME. I will ask for any fills  
needed. Thanks :-)

Station will be a 40m inverted-V with the apex @ 70' with 5 watts from  
K2 #568.

Good luck...hope to see you in the log.

73  
Paul K4FB

-----  
Date: Wed, 13 Nov 2002 18:32:22 -0600  
From: Lew Paceley <lew@paceley.com>  
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Cc: ccart@phideaux.com  
Subject: [140083] Re: No excuses TX... hmmm  
Message-ID: <006001c28b75\$4cf8bf40\$6501a8c0@swbell.net>  
MIME-version: 1.0  
Content-type: text/plain; charset=Windows-1252  
Content-transfer-encoding: 7BIT

Hi Chris,

A suggestion: Don't use the scope probe as a replacement for a coax jumper cable. The 1X probe setting is relative to the impedance that the scope expects to see and doesn't necessarily mean 50 ohms impedance through the probe cable. If you're using the scope probe as a jumper to the WM1 then the probe impedance may be why you're only seeing 100 mW at the WM1.

You said:

>>I'm seeing about 28Vpp on the input of the filter and about 15vpp on the output using the scope.

Another check calculation:  $P_o = V_{rms}^2/R$  or  $((15/2)*.707)^2$  divided by 50  $\approx$  560 mW  
Which is pretty close to

>>600mW, right?

Yes.

I think you'll be hard pressed to get 2W out of two 2N2222As as well.  
At least for more than a second or two ;-)

GL es

72/73,  
\*Lew\*  
N5ZE

-----  
Date: Wed, 13 Nov 2002 16:54:56 -0800  
From: "Tracy Markham" <tracy@bytemark.com>  
To: "QRP-L" <qrp-l@lehigh.edu>  
Subject: [140084] RE: QRP Definition - Input vs Output?  
Message-ID: <GNEOLGDJDOPEALHJMKLCOELADBAA.tracy@bytemark.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I always figure my input power mathematically when building a homebrew rig.  
I certainly want to know the efficiency.

How could anyone be satisfied with simply output power?

Now, I know there are guys that are not into efficiency - to get very linear sometimes ya gotta eat up a lot of power, like in a class A amp. But you'd still want to KNOW the efficiency, right?

Imagine if the FCC had left the rule to input power measurement, I wonder how the QRO guys would push the efficiency envelope ...

What's the efficiency of the average 1 watt PA? Like a 2n5109 or something ... ?? I'm usually happy with 60% plus. My old '6146 ran about 45% when throttled down to 10 watts.

Tracy N41GH

-----  
Date: Wed, 13 Nov 2002 17:45:46 -0800  
From: "William Phinizy" <k6whp@verizon.net>  
To: "QRP-L" <qrp-l@lehigh.edu>  
Subject: [140085] Re: It really frosts me....  
Message-ID: <000301c28b7f\$8e8abe40\$c863e043@k6whp>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

..or bounce them to a porno site!

-----  
Date: Wed, 13 Nov 2002 19:23:49 -0600  
From: "Jay" <aj4ay@worldnet.att.net>  
To: "Flying Pigs" <fpqrp-l@mpna.com>, "QRPL" <qrp-l@lehigh.edu>  
Subject: [140086] Truffle Announcement  
Message-ID: <006901c28b7c\$7ca18180\$8173560c@jay>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Fellow hounds,

It will be my pleasure to dish out the truffles tomorrow (Thursday) evening commencing at 0130 UTC and ending at 0200 UTC.

Frequency will be above 7.040, wherever I can find approximately 1kHz of

open space. I will be listening from my transmit frequency to 1kHz UP.

Rig will be a K2 running 5 watts to a 300 foot loop at 40 feet or an 86 foot long end fed wire that is approximately 45 feet up at its highest point. Both antennas have done very well so far this fall fox/truffle season. If (big ???) the ether gods smile on us, I should be able to hear just about everyone.

I will call CQ FP W8PIG FP K. When I catch a call, I will respond with YOUR CALL, RST, AL, JAY, 5W, YOUR CALL K  
If I don't need any fills, I'll send TU W8PIG FP K and then you can make your calls.

Please note that I will be using the O FISH YULE pig call W8PIG as opposed to the UNO FISH YULE call, S00000000WEEEEEE PIG.

Good luck and good hunting. Hope to see you all tomorrow evening.

Jay  
AJ4AY  
Mobile, AL  
QRPL 1372, ARCI 8131, FISTS 7917, FP -115, SOC 220

---  
Outgoing mail is certified Virus Free.  
Checked by AVG anti-virus system (<http://www.grisoft.com>).  
Version: 6.0.417 / Virus Database: 233 - Release Date: 11/8/2002

-----  
Date: Wed, 13 Nov 2002 20:27:29 -0500  
From: K2PQ <k2pq@comcast.net>  
To: qrp-l@lehigh.edu  
Subject: [140087] Re: FOX; Tomorrow  
Message-ID: <005401c28b7d\$012303c0\$0500a8c0@DOWNSTAIRS>  
MIME-version: 1.0  
Content-type: text/plain; charset=iso-8859-1  
Content-transfer-encoding: 7BIT

You'll actually be acting like a FOX ! Bravo !

-----  
Date: Wed, 13 Nov 2002 20:22:12 -0500



From: wkhibbert@juno.com  
To: qrp-1@lehigh.edu  
Subject: [140088] W20Y Mantra  
Message-ID: <20021113.202213.-397765.1.wkhibbert@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Here you go...

"CQ 75, This is W20Y, No Lid, No Kids, No Space Kadets. No Phony  
Phonetics, Wet Bottoms or School Bus Riders..."

There was something about Class A Operators Only, but I don't recall the  
exact phrasing on that.

73, Wm. Keith Hibbert, WB2VUO, TC/WNY ARRL Section  
President, Brockport Amateur Radio Klub  
"My night light runs more power than my Rig!!!"

---

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---

Date: Wed, 13 Nov 2002 20:50:33 -0500  
From: Chuck Ludinsky <cjl@mitre.org>  
To: neqrp@jonal.net, qrp-1@lehigh.edu  
Subject: [140089] NEQRP CW Net, Thursday, 14 November 02, 08:30 EST, 3.565MHz  
Message-ID: <3DD30169.4080904@mitre.org>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii; format=flowed  
Content-Transfer-Encoding: 7bit

The New England QRP Club's 80M CW net, WQ1RP, will meet again on  
Thursday, 14 November 2002, at 8:30 PM EST (01:30Z, 15 Nov 02) on or  
near 3.565 MHz. All hams are welcome. Net control operator will be  
Chuck, K1CL, operating from Chelmsford, MA.

With good conditions again last week, we had an excellent turnout for  
the net, with a total of ten participants:

AB1CW Ed Tyngsboro, MA 599  
AB8DF Ed Waterford, MI 569  
AB1AV Bill Hollis, NH 599  
KA3WMJ Ken Erwinna, PA 599

K1RC John Dracut, MA 599  
K1CWZ Spi Nashua, NH 599  
WA8BXN Mike nr Cleveland, OH 589  
WB1HBE John Chelmsford, MA 599  
K1YPP Dennis Hampstead, NH 599  
K1CL Chuck Chelmsford, MA net op

Thanks to everyone for QNI'ing. Bill, your homebrew transceiver sounded FB, as everyone seemed to agree. Congrats again to Dennis on winning the masters' mountain bike division. Hope to hear you all again this week.

72 DE K1CL,  
Chuck

-----  
Date: Wed, 13 Nov 2002 20:07:57 -0500  
From: Dan Wolfe <n4roa@mounet.com>  
To: qrp-l@lehigh.edu  
Subject: [140090] Re: FOX; Tomorrow  
Message-ID: <3DD2F76D.2CC7@mounet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Now that's the way to Fox hunt. Yeaaaaaaa Underdogs!

72/73...Dan,N4ROA

-----  
Date: Wed, 13 Nov 2002 21:28:54 -0500 (EST)  
From: Chris Cartwright <ccart@phideaux.com>  
To: QRPL List <qrp-l@lehigh.edu>  
Subject: [140091] Re: No excuses TX... hmmm  
Message-ID: <Pine.LNX.4.33.0211132128060.24829-100000@dns.phideaux.com.>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Ok, got that figured out, sort of... I used clip leads to tie up the WM-1 instead of the scope probe and I'm seeing about 650mW. Which is about 42% efficient, since it seems to use about 120mA for the driver and finals. Must be more to those scope probes than I thought :)

I did wind four turns of #22 wire on a FT50-43 for the L2 choke, and I'm probably going to build a 5 pole filter for the output. I'll use toroids 'cause I have 'em, and if I built it just like the article it wouldn't be as much fun. This thing sounds good on the Icom, but... The S-meter shows 15db more at 21.125Mhz, than it does at 7.0415. It's not shielded at all, any suggestions for kill the harmonic at the buffer stage?

Several people have told me I should be able to get a watt out of this thing at least. Maybe I'll "manhattan" one up tonight now that I know it works. Will post the results later.

72

```
-- Chris Cartwright,   Unix Administrator |      ccart@phideaux.com      --
-- N3XRV      ARRL-VE   Norcal Zombie #163 |      Oxford, PA 19363 FM29as   --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --
```

-----

Date: Wed, 13 Nov 2002 19:35:23 -0700  
From: "Rod N0RC" <rod@n0rc.us>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>,  
"cq-c-1" <CQCLIST@yahoogroups.com>,  
Subject: [140092] FS HP 971 DMM  
Message-ID: <000501c28b86\$7c2dcc90\$6501a8c0@greyrock>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Like new condition, 3 yrs old, well cared for.... \$160 shipped CONUS.

Picture at: <http://www.frii.com/~rwc/dmm/hp971.html>

73, Rod N0RC

-----

Date: Wed, 13 Nov 2002 19:12:05 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: qrp-l@lehigh.edu  
Subject: [140093] FOX: Solar Info  
Message-ID: <Pine.LNX.4.44.0211131905410.3138-100000@Bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

For November 12 UTC which ended 2 hours ago the flux was 178.4 and the A was 14 and the K was an average 3. The Page also said: Further M class flares are possible over the next 1-2 days while the region is at, and just behind the limb.

So all prey that the possible flares do not happen, and we will have pretty good conditions on 7.040 MHz at 0200 UTC.

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

-----  
Date: Wed, 13 Nov 2002 20:52:36 -0600  
From: "Stuart Rohre" <rohre@arlut.utexas.edu>  
To: "carl seyersdahl" <carlseye@tampabay.rr.com>, <qrp-l@lehigh.edu>  
Subject: [140094] Scotch 92 tape  
Message-ID: <015501c28b88\$e33f3a20\$4e100a0a@rohredt2000>

Go to 3M web site for the Scotch tape div. (Electrical Specialties I believe)

They are here in Austin at least the R&D part, and they give out free samples of short rolls of tapes at lectures they have done, and I bet you can request "engineering sample" off the web site. Most technical companies in commodities will send small samples of their product, if you do not abuse the privilege.

Please describe the tape, I got some samples at a club program but do not recognize that number. Will look thru my samples and see if I have some.  
72,  
Stuart K5KVH

-----

Date: Wed, 13 Nov 2002 22:09:09 -0500  
From: "Lee Mairs" <lairs@direcway.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Cc: "Ben Shaver" <benshaver@alum.mit.edu>  
Subject: [140095] Re: W20Y Mantra  
Message-ID: <01f101c28b8b\$36ba76e0\$3b6d020a@boomer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I think you have him confused with a famous W4 who lived in Northern  
Virginia...  
Lee, KM4YY

----- Original Message -----

From: <wkhibbert@juno.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Wednesday, November 13, 2002 8:22 PM  
Subject: W20Y Mantra

> Here you go...  
>  
> "CQ 75, This is W20Y, No Lid, No Kids, No Space Kadets. No Phony  
> Phonetics, Wet Bottoms or School Bus Riders..."  
>  
> There was something about Class A Operators Only, but I don't recall the  
> exact phrasing on that.  
>  
> 73, Wm. Keith Hibbert, WB2VUO, TC/WNY ARRL Section  
> President, Brockport Amateur Radio Klub  
> "My night light runs more power than my Rig!!!"  
>  
>  
> -----  
> Sign Up for Juno Platinum Internet Access Today  
> Only \$9.95 per month!  
> Visit [www.juno.com](http://www.juno.com)

-----  
Date: Wed, 13 Nov 2002 21:07:58 -0600  
From: "Dave Redfearn" <n4elm@attbi.com>  
To: "'Low Power Amateur Radio Discussion'" <qrp-1@lehigh.edu>

Subject: [140096] FS: LDG Z-11 & FT-817 Accessories - Update!  
Message-ID: <000001c28149\$c3d81830\$016fa8c0@Pavillion>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Still For Sale:

- 2. IRC Collins 300Hz CW filter - \$110.00
  - 4. Mountain-Ops FT-817/Z-11 case (w/o Flap) - Orange - \$60.00
- Or best offer + shipping from 75070

73 - Dave

=====  
Dave Redfearn, ARS N4ELM, McKinney, TX  
Email: n4elm@NOJUNKhome.com (to reply, remove NOJUNK)  
QRL? de N4ELM/qrp

-----  
Date: Wed, 13 Nov 2002 20:34:17 -0700  
From: Dave Pomeory <dave@dpomeroy.com>  
To: QRP-L <qrp-l@lehigh.edu>  
Subject: [140097] FT-897  
Message-ID: <20021113203417.0faf9d47.dave@dpomeroy.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

Can anyone tell me where to go (He He) to find out how good the FT-897 is for QSK CW? Can't seem to find a yahoo group or anything else. Thanks for your time.

--  
Dave Pomeroy K7DNP South East Washington

-----  
Date: Wed, 13 Nov 2002 19:27:15 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: "Jim Kortge, K8IQY" <jokortge@prodigy.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>

Subject: [140098] Re: Power Meter  
Message-ID: <Pine.LNX.4.44.0211131919220.3171-100000@Bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Let me add the obvious. If you have a volt meter that measures RMS voltage accurate to above your frequency of use, then with a good dummy load of 50 or 52 ohms, you can use  $P = E \times I$ , or  $E^2/R$  which is the one to use.

All this said a Bird Watt Meter measures out in Watts and with the proper slug it covers all the Ham Bands from 160M to 70 CM. They can be re-calibrated whenever you need to. And it's totally passive.

The older HP volt meters are the cheapest route.

On Wed, 13 Nov 2002, Jim Kortge, K8IQY wrote:

> At 07:36 AM 11/13/02 -0800, you wrote:  
>  
> >Group:  
> >  
> >I need to measure ac power. That is i need a power reading AC meter.  
> >I have heard the HP 400EL AC analog meter is good (10Hz to 10MHz)  
> >The use is building and testing HF equipment.  
>  
> The HP 400EL is not a power reading meter, it is an RMS voltmeter  
> that can measure across the frequency range you specified. It has  
> a log scale, so reads out in dB directly on its main scale, and  
> in RMS volts on its secondary scale.  
>  
> The counterpart to this voltmeter is the HP 3400A, whose primary  
> calibration is a linear RMS scale, with dB as the secondary scale.  
> Both meters are handy to have, and low cost usually.  
>  
>  
> >The cost range for the HP 400EL, that i have found, is \$75 to \$275.  
>  
> \$75 is the absolute highest I'd pay for one of the above, with \$25  
> to \$50 being more in line with the prices that I paid for mine.  
> Certainly \$275 is way too much IMHO.  
>  
>  
> >Any constructive comments please.  
>  
> See above. GL with you acquisition.  
>

> 72,  
>  
> Jim, K8IQY  
>  
>  
>

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

-----  
Date: Wed, 13 Nov 2002 22:06:56 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: tracy@bytemark.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [140099] Re: QRP Definition - Input vs Output?  
Message-ID: <3DD32160.E85A34A5@att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Tracy, they would do just what they do now and what they have been doing  
ever since I can remember: use a high-efficiency antenna tuner! <:}

That is what we used to call those "hidden" amps in the closets that the  
FCC wasn't supposed to see. A local ham was killed when he was working on  
his 8 KW linear literally in a closet and came in contact with the HV. I  
will leave his call unmentioned . . .

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 Icom IC-765 #2349 Icom IC-756 PRO #2121

Tracy Markham wrote:

>  
> ncy, right?  
>  
> Imagine if the FCC had left the rule to input power measurement, I wonder  
> how the QRO guys would push the efficiency envelope ...

-----



Date: Wed, 13 Nov 2002 22:02:46 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: wb8zcc@one.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [140100] Re: QRP Definition - Input vs Output?  
Message-ID: <3DD32066.A6729162@att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

The FCC makes it pretty easy for us: except on bands/segments where the limit is 200 watts, we are permitted a transmitter \*output\* of 1500 watts PEP regardless of mode, input power, efficiency, or whatever. Simple as that . . .

Prior to that, dealing with the regulations concerning "d-c input power to the final amplifier(s)" was difficult. The regulations stipulated that if your relatively crude measurements showed that you were inputting 900 watts or more, you had to show proof of accurate means for making voltage and current measurements.

I believe that it is pretty universally understood that QRP in the CW world means a maximum of five watts output from the transmitter - key-down. On SSB, I think that the ARRL still goes with ten watts PEP but I am not sure.

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 Icom IC-765 #2349 Icom IC-756 PRO #2121

-----  
Date: Wed, 13 Nov 2002 21:06:07 -0800  
From: "Dave Fifield" <dave@redhotradio.com>  
To: "'Low Power Amateur Radio Discussion'" <qrp-1@lehigh.edu>  
Subject: [140101] QRP-Lunch - South San Jose - This Saturday!  
Message-ID: <001101c28b9b\$8a9afcc0\$0200a8c0@AD6A>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Hi Folks,

This is an open invitation to all QRPers to come join us for a no-host lunch at Armadillo Willy's Barbeque in Camden Plaza, San Jose, this Saturday at noon. The food there is excellent!

Doug Hendricks, KI6DS, will be there with Brad Mitchell, WB8YGG, of Embedded Research fame, who will be in town visiting, so we're arranging this little impromptu get-together in his honor. Bring your latest QRP toy for show/tell.

No need to reply, just turn up if you have the time and inclination. Families/friends welcome.

72, Dave, AD6A

Directions:

Armadillo Willlys  
2071 Camden Avenue  
San Jose, CA 95124  
(408) 371-9033

<http://www.armadillowilllys.com/locations/store5.html>

>From North, take 880 south to 17 south and take the Camden Avenue exit south. About 1/2 mile down Camden Avenue on the left you will see the Camden Plaza shopping center. Willy's is in the left-hand-end corner next to Longs Drugs.

>From South, take 85 north. Exit at Union Avenue. Drive north on Union until you hit Camden Avenue, then turn left and immediately on your right you will see the Camden Plaza shopping precinct. Willy's is in the far corner on the right.

If you get lost, call me on 146.520 simplex, where I will be monitoring to help if necessary.

-----

Date: Thu, 14 Nov 2002 04:53:43 GMT  
From: hamjoel@juno.com  
To: qrp-l@lehigh.edu  
Subject: [140102] Input vs output  
Message-ID: <20021113.205442.24368.32122@webmail1.wlv.unttd.com>

yes sir, u bees all correct...

what ah likes about output power is it levels the playing field..  
5 watts is 5 watts... u can code it or modulate it like u wants and it still comes out to 5 watts what u playing with...

so it comes down to ability, conditions, and ur antenna, avery time u fire up at 5 watts... given life as it is ah don't sees nuttin meaux fair than

five watts at the output of ur radio...

all that efficiency stuffs adds up too is how much money u wants to spend on ur lectric bill, changing battery meaux often or not...

Qro an't a bad word iffin u use "the power necessary" as a definition. sometimes it just takes meaux power on some modes due to conditions, antenna, or whatever...

so don't got u self mad when a multi watt station done clobber ur five watt station... antenna and conditions being ok... he oughta do it... however they is ways to got u self around this, lots of times...

and sum times u gust gotta eat dirt and geaux away...

geaux build sumthin... play with the kids, grandkids....

ke1la joel  
in maine  
not that efficient  
sometimes...

KE1LA JOEL  
IN MAINE  
FREEZIN

---

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---

Date: Wed, 13 Nov 2002 23:11:20 -0500  
From: "Ken Newman" <n2cq@dandy.net>  
To: "W3BG" <W3BG@arrl.net>, "Norm Into" <normk8ni@neo.rr.com>,  
"QRP-L Reflector" <QRP-L@lehigh.edu>,  
Subject: [140103] [CONTEST] N2CQ QRP Contest Calendar Nov 14-30  
Message-ID: <003501c28b93\$e554f9c0\$529efa42@18.95.182.twsn1.md.home.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

---

N2CQ QRP CONTEST CALENDAR  
November 14-30, 2002

---

40 METER FOXHUNTS  
Fox Hunt - Thursdays - 9pm EST, 8PM CST, 7PM MST and 6PM PST.

Info: <http://www.cqc.org/fox>  
Truffle Hunt - Thursdays - 30 min before Fox Hunt  
Info: [http://fpqrp.com/pig\\_hunt.html](http://fpqrp.com/pig_hunt.html)

~~~~~  
LZ DX CONTEST (CW) (Bulgarian Federation of Radio Amateurs)  
Nov 16 - 1200z to Nov 17 - 1200z  
Rules: <http://www.qsl.net/lz1fw/contest/>

~~~~~  
ARRL Sweepstakes (Phone) ... QRP Category  
Nov 16 - 2100z to Nov 18 - 0300z  
Rules: <http://www.arrl.org/contests/rules/2002/nov-sweeps-rules.html>

~~~~~  
HOT Party (CW) ... QRP Category  
Nov 17 - 1300z to 1500z (40 Meters)  
Nov 17 - 1500z to 1700z (80 Meters)  
(HOMEBREW & OLDTIME - EQUIPMENT - PARTY)  
Rules: <http://www.sk3bg.se/contest/hotp.htm>

~~~~~  
CQ World Wide DX Contest (CW) ... QRP Category!  
Nov 23 - 0000z to Nov 24 - 2400z  
Rules: <http://www.cqwww.com/>

~~~~~  
Thanks to WA7BNM, SM3CER, ARRL and others  
for assistance in compiling this calendar.

Anyone may use this "QRP Contest Calendar" for your website, newsletter,  
e-mail list or other media as you choose.  
(Include a credit to the source of this material of course.)

72 de  
Ken Newman - N2CQ  
N2CQ@ARRL.NET  
\*\*\*\*\* QRP Contest Calendar \*\*\*\*\*  
<http://www.njqrp.org/data/contesting.html>  
<http://www.n3epa.org/Pages/Contest/contest.htm>  
<http://www.qsl.net/cqrp/contests.html>

-----  
Date: Wed, 13 Nov 2002 23:16:28 -0500  
From: Ed Tanton <n4xy@earthlink.net>  
To: showell@lrxms.net,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140104] Re: paddle wanted  
Message-ID: <5.1.1.6.2.20021113231343.01fef610@pop.earthlink.net>  
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi Scott... with your desired price, get the Kent paddle. It is one of-if not THE-best paddles for the money you can get, and fits your other criteria perfectly.

73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY  
189 Pioneer Trail  
Marietta, GA 30068-3466

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SEDXC NCDXA GACW QRP-ARCI  
OK-QRP QRP-L #758 K2 (FT) #00057

-----  
Date: Thu, 14 Nov 2002 00:49:58 -0500 (EST)  
From: "Scott Rosenfeld [N7JI]" <ham@w3eax.umd.edu>  
To: unlisted-recipients;; (no To-header on input)  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [140105] QRP, ERP, and EIRP  
Message-ID: <Pine.LNX.4.44.0211140042000.19456-1000000@w3eax.umd.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

There's power, efficiency, and gain, and HAAT, and F/B ratios.

Radio and TV, cell and microwave have to calculate these things.

Fortunately, I do not, nor does any of us, to participate in ham radio.

Sure, for some of us, it's fun to know what my EIRP is given I live 600' above the valley floor and I have a dipole 30' above the ground, and 5w output power at the antenna terminal plus 50' of RG-58.

If we were judged on EIRP, this would give us no incentive to "make as much of every watt" as possible. We'd just crank up the power to make a particular class.

Instead, we strive for better antennas, better and shorter runs of coax, more efficient transmatches, etc.

I think I'll take that approach anyday.

72,

Scott N7JI

Wonder what the EIRP of my mobile station is? 3w + 10' RG-58 + bonded ground + Screwdriver vertical through 5:1 balun xformer...

I'll just call it 3 very well cared for watts.

On Thu, 14 Nov 2002 hamjoel@juno.com wrote:

```
> yes sir, u bees all correct...
>   what ah likes about output power is it levels the playing field..
> 5 watts is 5 watts... u can code it or modulate it like u wants and it still
comes out to 5 watts what u playing with...
>   so it comes down to ability, conditions, and ur antenna, avery time
> u fire up at 5 watts... given life as it is ah don't sees nuttin meaux fair than
five watts at the output of ur radio...
>   all that efficiency stuffs adds up too is how much money u wants to spend on
ur lectric bill, changing battery meaux often or not...
>   Qro an't a bad word iffin u use "the power necessary" as a definition.
sometimes it just takes meaux power on some modes due to conditions, antenna, or
whatever...
>   so don't got u self mad when a multi watt station done clobber ur five watt
station... antenna and conditions being ok... he oughta do it... however they is
ways to got u self around this, lots of times...
> and sum times u gust gotta eat dirt and geaux away...
>   geaux build sumthin... play with the kids, grandkids....
>
> ke1la joel
> in maine
> not that efficient
> sometimes...
>
>
> KE1LA JOEL
> IN MAINE
> FREEZIN
>
>
> -----
```

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>

--

Scott Rosenfeld ARS N7JI  
541-684-9970 Eugene, OR Land o' much rain  
If you find me on the air, I'm probably in my car  
[ham@w3eax.umd.edu](mailto:ham@w3eax.umd.edu) <http://w3eax.umd.edu/~ham>

-----  
Date: Wed, 13 Nov 2002 22:20:8 -0600  
From: "Doc K0EVZ" <[dock0evz@earthlink.net](mailto:dock0evz@earthlink.net)>  
To: "qrp-l reflector" <[qrp-l@lehigh.edu](mailto:qrp-l@lehigh.edu)>  
Cc: "doc k0evz earthlink" <[dock0evz@earthlink.net](mailto:dock0evz@earthlink.net)>  
Subject: [140106] QSL and \$\$\$  
Message-ID: <412002114144208511@earthlink.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Gang:

A question about proper etiquette in QSLing. What if the DX has spent twice as much for postage as the USA operator sent him? Should the USA ham send some more funds? The DX in this case is a private individual and not a QSL manager. Ideas?

73,  
--Doc/K0EVZ

-----  
Date: Wed, 13 Nov 2002 23:00:27 -0700  
From: "Marshall Emm" <[mgemm@mtechnologies.com](mailto:mgemm@mtechnologies.com)>  
To: [qrp-l@lehigh.edu](mailto:qrp-l@lehigh.edu)  
Subject: [140107] FOX: Web Site Updated  
Message-ID: <3DD2D98B.6949.9E97AD@localhost>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7BIT  
Content-description: Mail message body

The 40M Fox Hunt results have been posted on the web site at  
<http://www.CQC.org/fox>

Interesting to note that the AVERAGE QSO count so far is over 100, and the top Fox score (N3BJ) was 140, which is only 15 shy of the all time record!

The Teams competition is going to be a barn burner too. Some dairy products group has a perfect score, which means all 5 team members worked all 4 foxes. But some of the other teams are right on their heels.

Good luck tomorrow night.... may the Fox be with you!

73

Marshall Emm  
N1FN/VK5FN  
n1fn@MorseX.com  
Morse Express and Oak Hills Research  
"Everything for the Morse Enthusiast"  
<http://www.MorseX.com>  
<http://www.ohr.com>  
(303)752-3382

--

-----  
Date: Thu, 14 Nov 2002 06:36:26 +0000  
From: "Dennis Ponsness" <wb0wao@hotmail.com>  
To: dock0evz@earthlink.net, qrp-1@lehigh.edu  
Subject: [140108] Re: QSL and \$\$\$  
Message-ID: <F40SBfHLJqew89TH3jT00010d39@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Doc,

Wow, that is a good question! I think it would depend on where the DX was located. If I understand you correctly, this was a "home" station and not an expedition, right? If the DX was in an entity that was not that "affluent", I probably would send some more. I try to get around that problem by sending \$2 with mine. If the postage rates are higher than \$2 - when the "official" exchange rate is used, usually the "underground" exchange rate in that country more than makes up the difference <grin>.

72 es oo



Dennis - WB0WAO

NJQRP #329  
FPQRP #-347  
SOC #499  
FISTS # 9299  
GACW #622  
ARS #1363

---

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---

Date: Wed, 13 Nov 2002 18:30:43 -0500  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [140109] Re: HB: Antenna Analyzer bridge  
Message-ID: <5.1.1.6.1.20021113182506.00b1d808@postoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Steve,

I've been tinkering with an antenna bridge along the lines of the one Joe Everhart and George Heron have posted info about on the NJQRP club web site. I'm getting my nerve up to design a DDS signal generator to drive it, but if the square wave from a digital osc. like the '4046 will do it accurately I may not bother. I've wondered about what effect the square waves would have on bridge accuracy, but a low-pass filter ahead of the bridge seems like it'll make it good enough.

Thanks!

Dave

At 04:50 PM 11/13/2002 -0500, you wrote:

>Some time ago, I built a little HF Antenna Analyzer bridge. It worked  
>pretty good, but since it used an L/C oscillator, it took a whole band of

>switched coils to cover the bands. Plus, it needed an air variable to give  
>it any kind of decent tuning range.  
>  
>Well, now that I discovered the R/C oscillator in the 74HC4046, which can  
>be voltage tuned from DC up to 20 or 30 Mhz, depending on who made the  
>chip, I replaced the L/C oscillator with a 74HC4046. It's not exceptionally  
>stable, but it actually compairs pretty favorably with the L/C version and  
>in this application, good stability isn't all that important. What is  
>important, is it tunes 1 to 21 Mhz (with the Fairchild HC4046 it's got in  
>there now), with the turn of a pot. Of course, you need a frequency counter  
>to know where it's tuned to :-)  
>  
>Anyway, if you need a way to detemine resonance of your antennas or a QRM  
>free way of tuning up your antenna tuner, and don't want to pay an arm and  
>a leg for a MFJ jobbie, this simple circuit might do it for you.  
>  
><http://www.qsl.net/kd1jv/rlb.HTM>  
>72,  
>Steve, KD1JV  
>"Melt Solder"  
>White Mountains of New Hampshire  
><http://www.qsl.net/kd1jv/>

-----  
"An optimist says the glass is half full. A pessimist says the glass is  
half empty. An engineer says you could have used a smaller glass."  
-----

Dave Hinerman  
WD8CIV@att.net

-----  
Date: Wed, 13 Nov 2002 23:33:47 -0800  
From: "Trevor Jacobs" <kg6cyn@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140110] UPDATE: Experimenter's DDS Signal Generator  
Message-ID: <00fd01c28bb0\$2bd54fa0\$fde3b3d1@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Gang,

Just a quick update on the kits. The first 56 kits have shipped! You  
should be seeing them in a day or so. I have a bunch of orders ready to  
ship upon payment. I only have 5 kits left at this point that are not

reserved. If you have a kit or kits reserved and have changed your mind please let me know so that I can count them among the available pile.

Thanks for the response on the kit. I was rather overwhelmed! I expected a few to sell, but not 90% in the first week! It's been a fun project. I'll be putting up some pictures before long of my completed unit with the enclosure that I'm having built. Thanks a bunch!

73's Trev KG6CYN

<http://home.earthlink.net/~kg6cyn>

<http://www.qsl.net/kg6cyn>

-----  
Date: Thu, 14 Nov 2002 00:07:41 -0800  
From: "Dave Fifield" <dave@redhotradio.com>  
To: <dave@dpomeroy.com>,  
    "'Low Power Amateur Radio Discussion'" <qrp-1@lehigh.edu>  
Subject: [140111] RE: FT-897  
Message-ID: <001901c28bb4\$e7f8eda0\$0200a8c0@AD6A>  
MIME-Version: 1.0  
Content-Type: text/plain;  
    charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Hi Dave,

I have an FT-897. On HF and 6m, the rig has a bunch of relays to select between TX and RX, so one of them (depending on which band you are on) clicks every time the rig transitions between TX and RX. Thus, the rig cannot do full QSK (all relays are too slow). It's in semi-mode permanently, with adjustable TX to RX delay. It uses the VOX circuit to achieve semi-QSK.

In use, it's not bad at all - you get used to it. I do think there's the possibility of doing a full QSK mod using PIN diode switches. I'm still thinking about it.....if and when I get something going, I'll crow about it on here and on one of my websites (probably <http://www.ad6a.com>).

On VHF/UHF, the FT-897 does have PIN diode switching, so is capable of better (faster) QSK with no relay clicking. I guess you could reduce the TX to RX delay time to a low value (or zero?) and then you'd have full QSK, but I haven't tried it, a) because I don't like full QSK and b) because I don't have time.

Hope this helps,  
Cheers es 72,  
Dave Fifield, AD6A

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf  
Of Dave Pomeory  
Sent: Wednesday, November 13, 2002 7:34 PM  
To: Low Power Amateur Radio Discussion  
Subject: FT-897

Can anyone tell me where to go (He He) to find out how good the FT-897  
is for QSK CW? Can't seem to find a yahoo group or anything else.  
Thanks for your time.

--  
Dave Pomeroy K7DNP South East Washington

-----  
Date: Thu, 14 Nov 2002 08:12:57 +0100  
From: Ingo Meyer DK3RED <dk3red@gmx.net>  
To: qrp-l@lehigh.edu  
Subject: [140112] Re: San Jose this weekend  
Message-ID: <5.1.1.6.1.20021114081110.009f5c20@pop.gmx.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello Brad,

>Any ham activities in San Jose this weekend?

Yes I know you mean this one in California but a small note from me. There  
are more than one city named San Jose around the world. Which San Jose? In  
California or TI or LU or CP or TG or XE or HP or DU or ...? ;o)))

72/73 de Ingo, DK3RED Don't forget: the fun is the power!

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| dk3red@t-online.de | <a href="http://www.t-online.de/~dk3red">http://www.t-online.de/~dk3red</a> |
| DL-QRP-AG #824     | <a href="http://www.dl-qrp-ag.de">http://www.dl-qrp-ag.de</a>               |
| QRP ARCI #11295    | <a href="http://www.qrparci.org">http://www.qrparci.org</a>                 |

-----  
Date: Thu, 14 Nov 2002 08:18:01 +0100  
From: Ingo Meyer DK3RED <dk3red@gmx.net>  
To: qrp-l@lehigh.edu  
Subject: [140113] Re: Code Improvements  
Message-ID: <5.1.1.6.1.20021114081539.00a38c20@pop.gmx.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello John,

>... I've always used an iambic key, but use it as  
>though it were a bug. What's the best way to make the switch?

If you want only to learn "squeezing" (and not high speed CW at the same time) try it with the article "Iambic Sending" by Chuck Adams, K7QO on his homepage <http://www.qsl.net/k7qo> .

72/73 de Ingo, DK3RED Don't forget: the fun is the power!

dk3red@t-online.de <http://www.t-online.de/~dk3red>  
DL-QRP-AG #824 <http://www.dl-qrp-ag.de>  
QRP ARCI #11295 <http://www.qrparci.org>

-----  
Date: Thu, 14 Nov 2002 08:30:21 -0500  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [140114] Re: HB: Antenna Analyzer bridge  
Message-ID: <5.1.1.6.1.20021114082809.00a6ae00@ipostoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

>Re: needing a frequency counter, I'm not sure that's true. Since I  
>always tune my antennas for the CW bands I was thinking of just  
>replacing the variable pot frequency control with a DIP switch and the  
>appropriate precision resistors for 7 - 21 MHz. That should be close  
>enough, don'tcha think??

Lew,

That chip isn't noted for its temperature stability - it's a PLL, and is usually used with a frequency control scheme of some sort.

If you don't mind the frequency drifting by a few (tens of) kilohertz, what you describe would be fine.

Dave

-----  
A Real Programmer can write FORTRAN in any language.  
-----

Dave Hinerman  
WD8CIV@worldnet.att.net

-----  
Date: Thu, 14 Nov 2002 07:06:56 -0700  
From: Dave Pomeory <dave@dpomeroy.com>  
To: QRP-L <qrp-l@lehigh.edu>  
Subject: [140115] RE: FT-897  
Message-ID: <20021114070656.60152464.dave@dpomeroy.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

Gang,

Thanks for the replys on the FT-897 QSK. No good QSK on HF with this radio. I guess I'll try something else. Thanks for the info.

--  
Dave Pomeroy K7DNP South East Washington

-----  
Date: Thu, 14 Nov 2002 06:59:04 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Doc K0EVZ <dock0evz@earthlink.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [140116] Re: QSL and \$\$\$  
Message-ID: <Pine.LNX.4.44.0211140656500.1334-100000@Bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Doc, it comes down to how you feel about it. You have the card so your happy. We are all rich compared to almost anywhere. So a letter with an IRC or 2 would be nice.

On Wed, 13 Nov 2002, Doc K0EVZ wrote:

> Gang:  
>  
> A question about proper etiquette in QSLing. What if the DX has spent  
> twice as much for postage as the USA operator sent him? Should the USA ham  
> send some more funds? The DX in this case is a private individual and not  
> a QSL manager. Ideas?  
>  
> 73,  
> --Doc/K0EVZ  
>  
>  
>  
>  
>  
>  
>  
>  
>  
--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

-----  
Date: Thu, 14 Nov 2002 07:47:07 -0600  
From: <stanw@toxsor.com>  
To: <qrp-1@lehigh.edu>  
Subject: [140117] Re: tiny micros need tiny I/O  
Message-ID: <000301c28be4\$574f14c0\$0364010a@toxsor.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

If you really want to build a micro size computer system don't pass up the Cybiko. It is available in two different models. The older model is on e-bay for \$15 all the time and it has a RS-232 port, the newer model can cost from \$15 to \$200 depending upon your source and it has a USB port.

They have a screen, full keyboard, joy stick function and the development software is available on the web FREE. It also has a built in 902 MHZ transceiver that you can use to link to another one or even do a remote to your rig for packet, etc.. Software on the web for ARPS.

The processor is a standard Motorola one.

The Cybiko was designed as a game machine for teenagers but is a really powerfull animal. Schematic available on the web also. Just do some searches under CYBIKO and same for e-bay. Lot of game software (source) available FREE on the web also. So if you want to play and learn a lot this is a very cheap development system.

de Stan AK0B ak0b@swbell.net

-----  
Date: Thu, 14 Nov 2002 10:43:58 -0500  
From: Dave Gingrich K9DC <gingrich2@dcg.org>  
To: qrp-l@lehigh.edu  
Subject: [140118] FOX Backchannel  
Message-ID: <5.1.0.14.2.20021114103736.02a80098@127.0.0.1>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

FOX hunt backchannel chatter tonight, IRLP Reflector 9203.

To find a node near you visit <http://status.irlp.net/statuspage.html>. Links at the top of the columns allow it to be sorted by state.

=====  
Dave Gingrich, K9DC - Indianapolis, Indiana USA  
K2 #2211, K1 #931, QRP-L #2376, ARS #1109,  
FPQRP #389, IRLP 4730/5730, k9dc.ampr.org  
=====

-----  
Date: Thu, 14 Nov 2002 11:04:27 -0500  
From: Michael Babineau <michael.babineau@sympatico.ca>  
To: qrp-l@lehigh.edu  
Subject: [140119] For Trade: Vibroplex Brass Racer Paddle  
Message-ID: <C0459D99-F7EA-11D6-AD5C-00039309268A@sympatico.ca>  
Mime-Version: 1.0 (Apple Message framework v546)  
Content-Type: text/plain; charset=US-ASCII; format=flowed  
Content-Transfer-Encoding: 7bit



Folks :

I have a near mint Vibroplex Brass Racer paddle that I am willing to trade for a Vibroplex/Norcal Code Warrior Jr Paddle or perhaps a single band QRP rig (20M preferred but would consider other bands).

Drop me a note if you are interested in a trade.

Michael VE3WMB

P.S. Here is the vibroplex link with a picture of the Brass Racer.  
<http://www.vibroplex.com/pics/brasrcr2.jpg>

-----  
Date: Thu, 14 Nov 2002 14:52:31 +0000  
From: "Brad Hernlem" <alihernlem@hotmail.com>  
To: qrp-1@lehigh.edu  
Subject: [140120] Mismatch Protection Design  
Message-ID: <F91jR78lFn5wk6LxdWH0000d23b@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

So what methods do y'all use to afford antenna mismatch protection in your homebrew designs ... or do you just not worry about it at QRP? I am soliciting your thoughts (and suggested URLs if any).

Brad KG6IOE

-----  
Add photos to your e-mail with MSN 8. Get 2 months FREE\*.  
<http://join.msn.com/?page=features/featuredemail>

-----  
Date: Thu, 14 Nov 2002 16:10:33 +0000  
From: k7gt@attbi.com  
To: qrp-1@lehigh.edu  
Subject: [140121] Re: FS/T K2 or to trade for various TT gear  
Message-ID: <20021114161034.PGJY1052.rwcrmh52.attbi.com@rwcrwbc55>

An oversight. Yes, the K2 has the SSB module installed. I did list the Kenwood MC43S mike with it. Price for a direct sale: \$950, FIRM.

GT

--

Allan K7GT

Pleasanton CA

-----  
Date: Thu, 14 Nov 2002 06:24:05 -0800  
From: <giorgio9330@earthlink.net>  
To: qrp-l@lehigh.edu  
Subject: [140122] FS: FT-817-Z11 etc  
Message-ID: <Springmail.0994.1037283845.0.81308000@webmail.pas.earthlink.net>

I have for sale the following...

Yaesu FT-817      \$500.00  
YF-122C            \$100.00  
TCX0-9            \$80.00 never used  
Z-11 auto tuner    \$125.00 factory assembled  
MP-2 portable antenna    \$140.00

The radio is only a couple months old and used only inside house...I will include the MH-36 microphone with purchase of FT-817 in addition to standard mic...

The tuner and antenna are about 1 year old and in excellent condition.

Please respond by e-mail to me directly and not to the list.

THANKS ALL. Albert Wa4cmi near Richmond, Va

-----  
Date: Thu, 14 Nov 2002 11:25:16 -0500  
From: "Jerry Bartachek" <leadsheet@musician.org>  
To: qrp-l@lehigh.edu  
Subject: [140123] Charge Gel Cell In Car  
Message-ID: <20021114162517.93416.qmail@mail.com>  
Content-Type: text/plain; charset="iso-8859-15"  
Content-Disposition: inline  
Content-Transfer-Encoding: 7bit  
MIME-Version: 1.0

I have a Walmart gel cell in a plastic case that I intend to use for portable operation. I removed the starting cables from the unit to make it less cumbersome to store and handle.

It has a wal-wart charger, but mentions that one can charge it also (for very short time) using a cable to the car's cigarette lighter. No such cable came with the unit.

When I fabricate my own cable, will I need to include a series resistor inside one plug, or is direct connection to the car battery through the lighter appropriate?

72,

Jerry KD0CA  
QRP-L #544  
QRP ARCI #5166  
FISTS Club #7064

--

---

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Single & ready to mingle? lavalife.com: Where singles click. Free to Search!  
<http://www.lavalife.com/wp.epl?a=2716>

-----

Date: Thu, 14 Nov 2002 09:01:35 -0600  
From: "KD5NWA" <KD5NWA@mbayona.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140124] RE: QRP Definition - Input vs Output?  
Message-ID: <0DEHLGCFKOMOKMFFMBCLGECMCCAA.KD5NWA@MBayona.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Last night on 80 meters there was a group on and one guy said he was running 3500 Watts he was S9+40, the others in the group were giving him hints on how he could get it up to 5000 watts with the tube he used in his linear. I guess these guys don't believe in QRP at all.

Cecil

KD5NWA

> -----Original Message-----  
> From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of  
> George, W5YR  
> Sent: Wednesday, November 13, 2002 10:07 PM  
> To: Low Power Amateur Radio Discussion  
> Subject: Re: QRP Definition - Input vs Output?  
>  
>  
> Tracy, they would do just what they do now and what they have been doing  
> ever since I can remember: use a high-efficiency antenna tuner! <:}  
>  
> That is what we used to call those "hidden" amps in the closets that the  
> FCC wasn't supposed to see. A local ham was killed when he was working on  
> his 8 KW linear literally in a closet and came in contact with the HV. I  
> will leave his call unmentioned . . .  
>  
> 73/72, George  
> Amateur Radio W5YR - the Yellow Rose of Texas  
> In the 57th year and it just keeps getting better!  
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
> K2 #489 Icom IC-765 #2349 Icom IC-756 PRO #2121  
>  
>  
> Tracy Markham wrote:  
> >  
> > ncy, right?  
> >  
> > Imagine if the FCC had left the rule to input power  
> measurement, I wonder  
> > how the QRO guys would push the efficiency envelope ...

-----  
Date: Thu, 14 Nov 2002 12:20:20 -0500 (Eastern Standard Time)  
From: "Mike WA8BXN" <hubby2k@hotmail.com>  
To: <gingrich2@dcg.org>, <qrp-l@lehigh.edu>  
Subject: [140125] Re: FOX Backchannel  
Message-ID: <3DD3DB54.00000C.99771@pentium>  
MIME-Version: 1.0  
Content-Type: Text/Plain  
Content-Transfer-Encoding: quoted-printable

Sounds interesting, is there a place to find out what this is all about and  
how to use it?

73/72 - Mike WA8BXN

FOX hunt backchannel chatter tonight, IRLP Reflector 9203.

To find a node near you visit <http://status.irlp.net/statuspage.html>. Links at the top of the columns allow it to be sorted by state.

-----  
Date: Thu, 14 Nov 2002 10:37:35 -0700  
From: "" <markb@abq.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140126] Re: Charge Gel Cell In Car  
Message-ID: <9f0082c2028a402e9f2d9e727a9cd2cb.markb@abq.com>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: quoted-printable

> I have a Walmart gel cell in a plastic case that I intend to use  
> one can charge it also (for very short time) using a cable to the =20  
> car's cigarette lighter=2E  
> When I fabricate my own cable, will I need to include a series=20  
> resistor inside one plug, or is direct connection to the car=20  
> battery through the lighter appropriate?

Since both the car battery and the gel cell are the same chemistry,  
no dropping resistor should be needed=2E However, be aware that some  
cigarette lighters are "hot", not switched with the key=2E This=20  
effectively puts the gel cell in parallel with the car battery=20  
which might cause some problems when starting the vehicle=2E So  
fusing the charging cable would be a good idea=2E As far as charge  
times, the only time any current would be flowing is while the  
engine is running=2E I doubt there are many trips you'd take with  
the engine running long enough to overcharge a gel cell (24+hrs)=2E  
I think their "very short time" warning was just so people wouldn't  
leave the power pack permanently connected=2E

Mark K5LXP  
Albuquerque, NM  
k5lxp@arrl=2Enet

-----  
Date: Thu, 14 Nov 2002 12:48:25 -0500  
From: Dave Gingrich K9DC <gingrich2@dcg.org>  
To: "Mike WA8BXN" <hubby2k@hotmail.com>, <gingrich2@dcg.org>,

<qrp-1@lehigh.edu>  
Subject: [140127] Re: FOX Backchannel  
Message-ID: <5.1.0.14.2.20021114123440.02acce48@127.0.0.1>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Discussion of IRLP is WAY off topic for this list, but the short answer is  
<http://www.irlp.net> For local usage instructions you should contact the  
repeater or node owner in your area.

At 12:20 11/14/2002 -0500, Mike WA8BXN wrote:  
>Sounds interesting, is there a place to find out what this is all about and  
>how to use it?  
>73/72 - Mike WA8BXN  
>  
>FOX hunt backchannel chatter tonight, IRLP Reflector 9203.  
>  
>To find a node near you visit <http://status.irlp.net/statuspage.html>. Links  
>at the top of the columns allow it to be sorted by state.

=====  
Dave Gingrich, K9DC - Indianapolis, Indiana USA  
K2 #2211, K1 #931, QRP-L #2376, ARS #1109,  
FPQRP #389, IRLP 4730/5730, k9dc.ampr.org  
=====

-----  
Date: Thu, 14 Nov 2002 12:23:15 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: <KD5NWA@mbayona.com>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140128] Re: QRP Definition - Input vs Output?  
Message-ID: <009e01c28c0a\$e744c2c0\$0201a8c0@fairviewtx.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Well, actually they do, Tracy, but their idea of QRP is 1500 watts!

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 Icom IC-765 #2349 Icom IC-756 PRO #2121

> Last night on 80 meters there was a group on and one guy said he was running  
> 3500 Watts he was S9+40, the others in the group were giving him hints on  
> how he could get it up to 5000 watts with the tube he used in his linear.  
I  
> guess these guys don't believe in QRP at all.

-----  
Date: Thu, 14 Nov 2002 10:32:01 -0800  
From: "Doug Hendricks" <ki6ds@dph.dpol.net>  
To: <qrp-l@lehigh.edu>  
Subject: [140129] San Jose QRP Lunch with Brad Mitchell This Saturday is a go.  
Message-ID: <00ad01c28c0c\$22753cc0\$4a0b0d0a@dph.dpol.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Guys, so far the following have told me that they will be at the QRP Lunch  
in San Jose for Brad Mitchell:  
Brad Mitchell  
Doug Hendricks  
Dave Fifield  
Mike Gipe  
Paul Maciel  
Bob Tellefsen

All qrpers are invited to attend. You can let me know or just show up. The  
lunch is at Armadillo Willy's located at 2071 Camden Ave. in South San Jose.  
See you there. 72, Doug

-----  
Date: Thu, 14 Nov 2002 13:26:08 -0500  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <leadsheet@musician.org>,  
      "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140130] Re: Charge Gel Cell In Car  
Message-ID: <003d01c28c0b\$55496f00\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-15"  
Content-Transfer-Encoding: 7bit

> I have a Walmart gel cell in a plastic case that I intend to use  
> for portable operation. I removed the starting cables from the unit  
> to make it less cumbersome to store and handle.  
>  
> It has a wal-wart charger, but mentions that one can charge it  
> also (for very short time) using a cable to the car's cigarette  
> lighter. No such cable came with the unit.  
>  
> When I fabricate my own cable, will I need to include a series  
> resistor inside one plug, or is direct connection to the car  
> battery through the lighter appropriate?  
>  
> Jerry KD0CA

I'd put a small lightbulb in series with the cable. That way, if the  
gel-cell is dead, the lightbulb will limit current. As the battery  
voltage  
'comes up', then the lightbulb will not 'effectively' limit the current.

Pick your bulb based on the maximum current you would like to  
allow at the minimum battery voltage of the gel-cell.

Mike

-----  
Date: Thu, 14 Nov 2002 10:33:44 -0800  
From: "Chuck Adams, K7Q0" <k7qo@earthlink.net>  
To: <qrp-1@lehigh.edu>  
Subject: [140131] Re: SideKick Builders Report de KI6DS  
Message-ID: <5.1.1.6.0.20021114095647.01ab5e98@pop.earthlink.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 11:19 PM 11/12/2002 -0800, Doug Hendricks wrote:

>...snip snip...

>Assembly Suggestions:

>1) The manual on sheet 1, step 1 describes the Manhattan pad sizes. The  
>smallest pads are called out as being 1/8 inch by 3/16 inch. I found this to  
>be too large almost everywhere on the board. For the smallest pads, I used a  
>size of 1/8 inch by 3/32 inch. This is the same size as Jim Kortge K8IQY



>suggests in his 2N2/40 article in QRPP.  
>

I built my SideKick but I, being a fan of round pads and the neatness factor, decided to bite the bullet and go with the rectangular pads, but I found the material in the kit for the pads too large for my liking. But I decided to, in the same fashion that I used for the IC mounting pad jig, create a technique for making the pads using the shear. I did this shortly after Pacificon, but I am working on writing up the technique for creating the pads with photos. I have done so but I'm in a crunch for several articles that I have been asked to write for several newsletters. And this stuff takes time as there is a lot of stuff that goes on behind the curtains before an article is completed. And remember I lost use of my shear for a couple of days when I broke it. And then that caused a trip to the doctor several days after that 'cuz I thought I was having a chest pains but it was a strain due to pulled rib cage. I did apply a little pressure when I broke the shear. :-) Then there was SS and WY trip, .... No excuses, just I'm not in any hurry on some of the stuff and the web page..... And Wednesdays are spent earning extra money to pay for this stuff. Yesterday paid for another Argo V. :-)

Just a quick note on the electric toaster and paint. I have found that 150 degrees for more than a couple of hours seems to be the right combination. At the higher temps, say 250 degrees F, the paint becomes discolored and you should just be patient and take the longer times and lower temps to get a professional result. And it is so much better to have the fumes out in the garage/shop area than in the house. The EPA and you and your family will be greatly appreciative of the extra \$30 for the toaster and that is money well spent. IMHO.

I finished a SW-30+ that I bought at Pacificon from K1SWL, with the freq-mite and RockMite keyer chip. That's \$55 + \$20 + \$5 = \$80 for a 30 meter rig with additional small expenses for connectors and two pots. What I wind up with is a 30 meter xcvr with AFA (audio output for frequency location) and a complete Iambic Keyer. That is the best price I've found for a single band rig with keyer. And you can get it for 80, 40, 30, and 20 meters (SW-XX+ series where XX is one of the above bands). And the case cost me about \$3.00 in materials including paint and primer. :-)

One of the biggest hidden (well, OK, not so hidden) expenses to this hobby is the years of collecting tools. If you just buy the basics:

1. Soldering Iron and Solder
2. Chain Nose Pliers
3. Diagonal Cutters
4. Hobby Knife
5. Wire Stripper
6. Screwdrivers

...

AND then start in on the expensive items

N. Drill Press

N+1. Shear/Brake/Roller Combo

N+2. Toaster

and the list grows monthly....

You find that you have some pretty serious money tied up for building stuff. But I look at it as being much much cheaper than seeking professional help from PhD's in Psychology at more than \$150 per hour. :-)  
And then again we really don't have to justify the money spent on any hobby. We do it because it is just there. And we are having fun.

So keep building and I'll try sometime next week to get the pics of the SideKick and the pad scheme on the web page. I have another SWL receiver on the web page built with the round pads with the transmitter section as work in progress when I get back to it. It's more fun to have several projects going at once. ;-)

FYI

Chuck Adams, K7QO

<http://www.qsl.net/k7qo> and <http://www.earthlink.net/~k7qo>

Moving to Arizona? ---- Please bring your own water.

-----  
Date: Thu, 14 Nov 2002 13:05:33 -0500  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@lehigh.edu  
Subject: [140132] Re: HB: Antenna Analyzer bridge  
Message-ID: <3.0.6.32.20021114130533.007d62d0@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>>replacing the variable pot frequency control with a DIP switch and the  
>>appropriate precision resistors for 7 - 21 MHz. That should be close

>>enough, don'tcha think??

>

>Lew,

>

>That chip isn't noted for its temperature stability - it's a PLL, and is  
>usually used with a frequency control scheme of some sort.

>

This is true. Short term stability is adequate, but long term? A way around  
this is to add a "fine tune" pot. You can spot the frequency with your  
receiver, if your using this as an aid to adjusting an ATU.

BTW, at the request of a Blind ham, I'm going to try adding a second HC4046  
as a variable audio tone output. This would eliminate the need to find a  
suitable meter or to look at it :-). Could make for a smaller package over  
all and easier to use in some situations.

72,

Steve, KD1JV

"Melt Solder"

White Mountains of New Hampshire

<http://www.qsl.net/kd1jv/>

-----  
Date: Thu, 14 Nov 2002 10:57:45 -0800

From: "DTX" <dtx@wood.tzo.com>

To: <qrp-1@lehigh.edu>

Subject: [140133] Re: QRP Definition - Input vs Output?

Message-ID: <004e01c28c0f\$b7d0aea0\$0c00a8c0@home>

MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Yes, for an idea of the variations in the concept of "minimum power  
required" one just needs to chat with some of the good ol' boys down on 160  
about what is needed to work across town on a summer afternoon <G>

Gary WA6DTX

----- Original Message -----

From: "George, W5YR" <w5yr@att.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Thursday, November 14, 2002 10:23 AM

Subject: Re: QRP Definition - Input vs Output?

> Well, actually they do, Tracy, but their idea of QRP is 1500 watts!  
>  
> 73/72, George  
> Amateur Radio W5YR - the Yellow Rose of Texas  
> In the 57th year and it just keeps getting better!  
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
> K2 #489 Icom IC-765 #2349 Icom IC-756 PRO #2121  
>  
> > Last night on 80 meters there was a group on and one guy said he was  
> running  
> > 3500 Watts he was S9+40, the others in the group were giving him hints  
on  
> > how he could get it up to 5000 watts with the tube he used in his  
linear.  
> I  
> > guess these guys don't believe in QRP at all.  
>

-----  
Date: Thu, 14 Nov 2002 14:08:32 -0500 (EST)  
From: Chris Cartwright <ccart@phideaux.com>  
To: QRPL List <qrp-l@lehigh.edu>  
Subject: [140134] Re: No excuses TX... hmmm (long)  
Message-ID: <Pine.LNX.4.33.0211141151550.24829-100000@dns.phideaux.com.>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

The score so far, 7 dead, 1.7 watts out!!! Ever since N6KR called them them "cockroaches" I don't feel so bad about killing 2N2222's. Oddly, I haven't let the smoke out of any yet, they just had some sort of fatal internal heart attack. Now that I've "blown" 35 cent's worth of parts, I'm gonna have to start being careful :) So education doesn't always have to be expensive.

I did hand select a bunch of transistors, by replacing them one at a time until I got the best of the bunch. I replaced C4 with a 330pF cap, and the output to the buffer is much lower (voltage) and much cleaner. This acutally increased output. I'm not using L1, and am using a fixed 68pF for C1. I've also added a third final, but with just two, I get 1.44 watts out. I added a fourth, but there was no gain, so I took it out. I did build a 5 element Chebyshev filter with two 1.3uH toroids, two 470pF caps and an 890pF center cap. It's on a little PCB with three "legs" made out of cap leads so I can plug it into the board and use it for other stuff. I might have to build a few different building blocks (osc, rf

amp, vfo) like that to play with. Sort of an upscale "101 Electronics Projects" board I had as a kid.

I've used 220, 270 and 330pf caps for C5 and C6, and settled on the 270's since I found them last. I think the RC network on the base of the finals must have some resonance around 7Mhz, but I haven't found the math in the handbooks yet to explain what they really do, anyone... Bueller, Bueller? That might be why when I put a "hot" 2N2222 as the buffer at Q2 I had to change C4. I'm guessing C4/R4 do some sort of serial resonance thing.

Speaking of which, Q2 seems to be the heart of this thing, once I found a "hot" transistor, output jumped about 25%. There are four blocks to this TX, and I'll explain what I think they do, and hopefully someone will correct me, cause my observations don't bear it out.

Oscillator - Makes the signal that starts the whole thing. Weak and needs to be amplified.

Buffer - This is to isolate the oscillator so that downstream "stuff" doesn't affect the output, pulling, loading, etc. Should be about 1:1 gain.

Driver - This is an amplifier to give the weak signal from the osc/buff section enough "oomph" to drive the power amp.

Power Amp - Make big ones out of little ones :) This should take the input and make it "x" times bigger.

Filter - This is a low-pass, so everything under (approx) 11Mhz should be shunted to ground. This keeps you from working multiple bands at the same time. This does make the output very, very clean. I'm getting a nice symetrical sine wave at the output, while the input has a "dent" in the descending side of the wave.

To verify the above, I hooked the scope to base of the trasistor(s) for each section and noted the voltage. All of these were "top to bottom" readings from the scope. I hesitate to say peak-to-peak since some of them are too ugly to call a sine wave.

These measurements were taken with a 20MHz scope, (I have a 60Mhz if it makes difference), 10:1 probe, at 13.8V supply.

1. At the input of the buffer (base of Q2), I'm seeing 4V, there's a peak 2V above ground and a much sharper one 2V below.
2. On the base of Q3/4 (driver) it's at 10.1V, about 6V above and 4V below the zero line. The top half of the signal looks clean, and the botton half is a bit messy.
3. On the base of Q5/6 it's 8V (9V on Q3/4 emitters). 4V above zero and

4V below. Sharp peak, with what I'd have to call a "front porch" from back in my TV servicing days.

So the buffer seems to be doing most of the amplifying, and the driver seems to be doing buffering. I have to admit that the whole driver section is a bit of a mystery, I mean, it has an NPN and PNP (2N3904 & 2N3906) tied back to back. Is that to get a square wave out of a sine wave to drive the finals? Or to invert the input? 'Cause it sure don't look like a square wave coming out of them.

4. At the input to the filter, past C10 I see 31.5V, and out of the filter is 26V. I'm guessing that there also needs to be some impedance transformation in the filter, possibly because of the third final. I'm seeing very close to the same voltage through the filter with only two finals (31v/25v). My filter assumes 50 in, 50 out... I think :)

I'm hoping to find the \*real\* specs on the 2N2222A vs the 2N4400, since they both cross to an ECG/NTE 123AP in my books. This might account for the 50% difference I'm seeing from what's claimed in the article. If someone has 10 of the 2N4400's, I'd be happy to trade double the number of 2N2222's, could even throw in a 4013.

In the meantime, I've found the Autumn '98 "Elmer 101 Special Issue" of QRPp (the SW-40+ issue) and think I have a lot of reading to do. On the other hand, it might be time to cobble up a TR switch and put this thing on the air. :)

72

-- Chris Cartwright, Unix Administrator | ccart@phideaux.com --  
-- N3XRV ARRL-VE Norcal Zombie #163 | Oxford, PA 19363 FM29as --  
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

-----  
Date: Thu, 14 Nov 2002 13:15:17 -0500  
From: "Lee Mairs" <lmairs@direcway.com>  
To: <markb@abq.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140135] Re: Charge Gel Cell In Car  
Message-ID: <00ba01c28c09\$cf68c760\$3b6d020a@boomer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

There may be a problem here. Gel cells and flooded batteries are not the same chemistry. Every gel cell I've checked on has a maximum charging voltage of no more than 14.1 VDC. I am very careful to avoid mixing flooded and gel cells in the same system on boats. Occasionally, there is no choice, but I make sure the customer is aware of the potential problem.  
73 de Lee, km4yy

----- Original Message -----

From: <markb@abq.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, November 14, 2002 12:37 PM  
Subject: Re: Charge Gel Cell In Car

> I have a Walmart gel cell in a plastic case that I intend to use  
> one can charge it also (for very short time) using a cable to the  
> car's cigarette lighter.  
> When I fabricate my own cable, will I need to include a series  
> resistor inside one plug, or is direct connection to the car  
> battery through the lighter appropriate?

Since both the car battery and the gel cell are the same chemistry, no dropping resistor should be needed. However, be aware that some cigarette lighters are "hot", not switched with the key. This effectively puts the gel cell in parallel with the car battery which might cause some problems when starting the vehicle. So fusing the charging cable would be a good idea. As far as charge times, the only time any current would be flowing is while the engine is running. I doubt there are many trips you'd take with the engine running long enough to overcharge a gel cell (24+hrs). I think their "very short time" warning was just so people wouldn't leave the power pack permanently connected.

Mark K5LXP  
Albuquerque, NM  
k5lxp@arrl.net

-----  
Date: Thu, 14 Nov 2002 14:23:18 -0500  
From: Alex <kr1st@amsat.org>  
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>

Subject: [140136] Measuring ground efficiency?  
Message-ID: <3DD3F826.1B15F103@amsat.org>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-transfer-encoding: 7bit

Hi there,

Last night I installed a 10m hamstick for my beaconet station I'm setting up. I put the hamstick on the corner of a wooden fence and used coax braid to connect the ground at the feed point with the thin (insulated) metal chicken wire that runs along the wooden fence.

When I was done I started to wonder how I would know if this chicken wire is going to provide me a good RF ground. Or more in general, how do you know if any ground is going to be an effective RF ground? Perhaps a dumb question, but I'm rather confuzzled about it.

73,  
--Alex KR1ST

-----  
Date: Thu, 14 Nov 2002 14:37:40 -0500  
From: David Snowdon <norway@passport.ca>  
To: qrp-1@lehigh.edu  
Subject: [140137] ID those SMD parts  
Message-ID: <20021114143630.4EB4.NORWAY@passport.ca>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Trying to identify a SMD component? This site has an extensive list of European and American parts:

<http://www.tkb-4u.com/code/smdcode/indexsmdcode.php>

--  
David Snowdon <norway@passport.ca>

-----  
Date: Thu, 14 Nov 2002 12:09:16 -0700  
From: "" <markb@abq.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140138] Re: Charge Gel Cell In Car  
Message-ID: <5ff6fe33d868461897c2b01ccdae510b.markb@abq.com>



MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: quoted-printable

> Gel cells and flooded batteries are not the same chemistry=2E=20

You're right if you're referring to the plate composition=2E But  
for practical purposes they are equivalent enough to do the  
task at hand=2E

> Every gel cell I've checked on has a maximum charging voltage=20  
> of no more than 14=2E1 VDC=2E =20

That's continuous/float=2E Charging curves often include excursions  
up to 15=2E5V for gel and AGM cells=2E These have more calcium than  
antimony in the plates, to lessen the reduction of water in the=20  
cells over the life of the battery=2E

> I am very careful to avoid mixing flooded and gel cells in the=20  
> same system on boats=2E =20

Very true, as those are permanently connected, and the charge/float  
spec's \*are\* different between the two types=2E But for the purposes  
of charging a gel cell from a cigarette lighter plug there is basically  
no issue=2E In fact, it will take a long time to bring a gel cell up=20  
to anywhere close to 100% charging it at only 14=2E2-14=2E4V that auto  
charging systems (are supposed to) put out=2E Hook one up to a power  
supply and watch the current at 14=2E2V to see for yourself=2E =20

>I make sure the customer is aware of the potential problem=2E

Anytime you mix chemistries, Ah capacity or even battery age it is  
an invitation to problems=2E Batteries just aren't "energy buckets"  
you can fill and empty at will, they are mechanically, thermally  
and electrically very sensitive devices=2E People that don't=20  
understand this will be making more trips to the store to buy  
new batteries=2E Many old wife's tales about batteries out there,  
best to investigate and learn before spending a lot of \$ on=20  
replacements=2E

Mark K5LXP  
Albuquerque, NM  
k5lxp@arrl=2Enet

-----  
Date: Thu, 14 Nov 2002 12:19:04 -0700  
From: "" <markb@abq.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140139] Re: Charge Gel Cell In Car  
Message-ID: <40a30f2409b9448fb3a9289c1345e4e4.markb@abq.com>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: quoted-printable

----- Original Message -----  
From: Mike Yetsko

> I'd put a small lightbulb in series with the cable=2E =20

That will work great=2E Also gives you a visual indication of how much  
current the battery is pulling, dim or extinguished equals full charge=2E

Mark K5LXP  
Albuquerque, NM  
k5lxp@arrl=2Enet

-----  
Date: Thu, 14 Nov 2002 11:32:06 -0800  
From: "Trevor Jacobs" <kg6cyn@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [140140] OT:Trying to e-mail David Porter  
Message-ID: <003401c28c14\$84615100\$d1beb2d1@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

David,

I'm sending this to the list in hopes that you get it this time. I've  
replied to you all 3 times but you don't seem to be receiving my e-mail.

You are # 3 on the list... Sorry for the OT bandwith....

73's Trev KG6CYN

<http://home.earthlink.net/~kg6cyn>

<http://www.qsl.net/kg6cyn>

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Date: Thu, 14 Nov 2002 13:13:41 -0700  
From: "" <markb@abq.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [140141] Re: Measuring ground efficiency?  
Message-ID: <c57da68c584249c6a2ec8b1d99e4e777.markb@abq.com>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: quoted-printable

> how do you know if any ground is going to be an effective RF ground?=20

One characteristic that I've noticed is how sharp the point of resonance is=2E I've found that as I've added radials to a vertical, the 2:1 SWR bandwidth starts to get smaller=2E Which translates to less ground loss effect, hence more efficient ground plane (presumably)=2E

Mark K5LXP  
Albuquerque, NM  
k5lxp@arrl=2Enet

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Date: Thu, 14 Nov 2002 15:38:30 -5  
From: "Bill Kelsey - N8ET - Kanga US" <kanga@bright.net>  
To: qrp-l@lehigh.edu  
Subject: [140142] Ft Wayne Hamfest QRP Forum Reminder  
Message-ID: <200211142038.gAEKcfk7019221@rhombus.bright.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

Don't forget the Ft. Wayne Indiana Hamfest this weekend with the QRP Forum on Sunday at 11 AM.

Feel free to leave your show and tell items at my tables (B108-B109) so you

don't have to lug them around during the hamfest.

73 - Bill - N8ET

Kanga US

kanga@bright.net

<http://www.bright.net/~kanga/>

419-423-4604

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End of QRP-L Digest 2740

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